FORM PTO-1449

1

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTY. DOCKET ASMEX.256

December 3, 1999

APR 2 4 2000

APPLICATION NO. 09/452,844

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT
Raaijmakers et a

GROUP 2811

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)	
RNR	4,058,430	11/15/77	Suntola et al.	156	64		
PENR	4,747,367	5/31/88	Posa	118	715	-	
RNR	4,761,269	8/2/88	Conger et al.	422	245		
RUR	_5,071,670	12/10/91	Kelly	427	38		
PANZ	5,418,180	5/23/95	Brown	437	60		
Pare	5,608,247	X. 413197=	Brown	257	306		
Rur	5,688,724	11/18/97	Yoon et al.	437	235		
RUR	5,769,950	6/23/98	Takasu et al.	118	715		
Rup	5,916,365	6/29/99	Sherman	117	92		

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)				
RANC	Abeles, et al., "Amorphous Semiconductor Superlattices," Physical Review Letters, Vol. 51, No. 21, Nov. 21, 1983, pg. 2003 - 2006.				
nur_	Adler et al., "Single-Device Memory Cell Having A Transistor Metal Silicate Capacitor Dielectric And Ion-Implanted Storage Node," IBM Technical Disclosure Bulletin, Vol. 25, No. 7A, Dec. 1982, pg. 3494 - 3495.				
RUR	Desu, et al., "Enhanced dielectric properties of modified Ta2O5 thin films," Mat. Res. Innovat., Vol. 2, 1999, pg 299 - 302.				
RWZ	Fazan et al., "A High-C Capacitor (20.4 fF/μm²) with Ultrathin CVD - Ta2O5 Films Deposited on Rugged Poly-Si for High Density DRAMs," IEDM, 1992, pg. 263 - 266.				
Rus	Kim et al., "The effects of substrate and annealing ambient on the electrical properties of Ta2O5 thin films prepared by plasma enhanced chemical vapor deposition," Thin Solid Films, Vol. 253, 1994, pg. 435 - 439.				
RUR	Kim et al., "Novel poly-Si/Al2O3/poly-Si Capacitor for High Density DRAMs," 1998 Symposium on VLSI Technology Digest of Technical Papers, pg. 52 - 53				
PUR	Kukli et al., "Atomic Layer Epitaxy Growth of Tantalum Oxide Thin Films from Ta(OC ₂ H ₅) ₅ and H ₂ O," J. Electrochem. Soc., Vol. 142, No. 5, May 1995, pg. 1670 - 1674.				
rur	Leskelä, et al., "Atomic Layer Epitaxy in Deposition of Various Oxide and Nitride Thin Films," Journal De Physique IV, Vol. 5, June 1995, pg. C5-937 - C5-951.				
PUR	Niinistö, et al., "Synthesis of oxide thin films and overlayers by atomic layer epitaxy for advanced applications," Materials Science and Engineering B41, 1996, pg. 23 - 29.				
RUP	Ritala, et al., "Perfectly Conformal TiN and Al2O3 Films Deposited by Atomic Layer Deposition," Chemical Vapor Deposition, Vol. 5, No. 1, 1999, pg. 7 - 9.				
ROUR	Ritala, et al., "Zirconium dioxide thin films deposited by ALE using zirconium tetrachloride as precursor," Applied Surface Science, Vol. 75, 1994, pg. 333 - 340.				
RINC	Sakaue, et al., "Digital Chemical Vapor Deposition of SiO2 Using a Repetitive Reaction of Triethylsilane/Hydrogen and Oxidation," Japanese Journal of Applied Physics, Vol. 30, No. 1B, Jan. 1990, pg. L124 - L127.				
Paul	Singer, Peter, "Wafer Processing: Atomic Layer Deposition Targets Thin Films," Semiconductor International, Vol. 22, No. 10, Sept. 1999, pg. 40.				
PUR	Sneh, et al., "Atomic layer growth of SiO ₂ on Si(100) using SiCl ₄ and H ₂ O in a binary reaction sequence," Surface Science, Vol. 334, 1995, pg. 135 - 152.				

EXAMINER Kuro Roahesiqui

DATE CONSIDERED

3/2/10/

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

•			SHEET 2 OF 2
FORM PTO-144	9 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. ASMEX.256A	APPLICATION NO. 09/452,844
INFORMAT	ION DISCLOSURE STATEMENT	APR 2 4 2000	
	BY APPLICANT	APPLICANT Raaijmakers et and Transport	
(USE SEVI	ERAL SHEETS IF NECESSARY)	FILING DATE December 3, 1999	GROUP 2811

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)				
PUR	Tiitta, et al., "Preparation and Characterization of Phosphorus-Doped Aluminum Oxide Thin Films," Materials Research Bulletin, Vol. 33, No. 9, 1998, pg. 1315 - 1323.				
run	Vehkamäki, et al., "Growth of SrTiO ₃ and BaTiO ₃ Thin Films by Atomic Layer Deposition," Electrochemical and Solid-State Letters, Vol. 2, No. 10, 1999, pg. 504 - 506.				
RUR	Wise, et al., "Diethyldiethoxysilane As A New Precursor For SiO ₂ Growth On Silicon," Mat. Res. Soc. Symp. Proc., Vol. 334, 1994, pg. 37 - 43.				
- "					

W:\DOCS\ASA\ASA-5463.DOC 040300

EXAMINER Reuro Rochegioni DATE CONSIDERED 3/2/(0)

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT, COMMUNICATION TO APPLICANT.